

IN THE CLAIMS:

Please CANCEL claims 79-84 without prejudice or disclaimer, AMEND claims 25, 32, 34, 35, 40-42, 44, 45, 48 and 49 and ADD new claims 85 and 86 as follows.

1-24. (Cancelled)

25. (Currently Amended) An apparatus, comprising:

~~an access node portion~~ a processor configured to
provide access to a wireless communication network based on an IEEE
802.11 standard, and
~~a processor configured to determine and transmit communication~~
information to a subscriber terminal, wherein
said communication information ~~comprising~~ comprises frequency band
information indicating a plurality of frequency bands on which at least one access node
portion of the wireless communication network is configured to communicate, ~~wherein~~
said processor is further configured to incorporate the communication information
in signaling using a transmission of specific frames to said subscriber terminal, and
the communication information further comprises a frequency band coverage
indicator related to at least one frequency band of neighboring access nodes of the
apparatus in the wireless communication network.

26. (Cancelled)

27. (Previously Presented) The apparatus according to claim 26, wherein said frequency bands comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

28. (Previously Presented) The apparatus according to claim 25, wherein said communication information further comprises a multiple band indicator related to an access node.

29. (Previously Presented) The apparatus according to claim 25, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of an access node.

30. (Cancelled)

31. (Previously Presented) The apparatus according to claim 25, wherein said communication information further comprises a frequency channel indicator that indicates the frequency channel used by the apparatus at the respective frequency band.

32. (Currently Amended) An apparatus, comprising:
a ~~communicator~~processor configured to
communicate in a wireless communication network based on an IEEE
802.11 standard; and
~~a receiver configured to receive communication information transmitted~~
from at least one access node of the wireless communication network, wherein
said communication information ~~comprising~~comprises frequency band
information indicating a plurality of frequency bands on which the at least one access
node is configured to communicate, wherein said communication information is received
from said at least one access node by signaling by transmission of specific frames; ~~and~~
~~the~~ the processor is configured to process the received communication information so
as to determine, based on the communication information, a communication connection
capability of at least part of the at least one access node on the basis of the frequency
band information, ~~wherein~~
the ~~apparatus~~processor is configured to decide on a communication connection
changeover for the ~~communicator of the apparatus~~ by using a processing result, and
the communication information further comprises a frequency band coverage
indicator related to at least one frequency band of neighboring access nodes of the
apparatus in the wireless communication network.

33. (Cancelled)

34. (Currently Amended) The apparatus according to claim ~~33~~32, wherein said frequency bands comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

35. (Currently Amended) The apparatus according to claim 32, wherein said ~~receiver~~processor is further configured to extract the communication information from a beacon packet broadcasted from the access node.

36. (Previously Presented) The apparatus according to claim 32, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

37. (Previously Presented) The apparatus according to claim 32, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one transmitting access node.

38. (Cancelled)

39. (Previously Presented) The apparatus according to claim 32, wherein said communication information further comprises a frequency channel indicator to indicate the frequency channel used by the access node at the respective frequency band.

40. (Currently Amended) The apparatus according to claim 32, wherein the processor is further comprising: a detector configured to detect a signal strength indicator on a predetermined frequency band, ~~wherein said processor is further configured to~~ compare the detected signal strength indicator with a predefined threshold value, wherein the result of the comparison indicates an estimation of the communication connection capability of an access node on another frequency band, and ~~said apparatus is configured to use the result of said comparison to decide~~ on the communication connection changeover.

41. (Currently Amended) The apparatus according to claim 32, wherein the ~~apparatus~~processor is further configured to decide to change the communication connection from the present frequency band to another frequency band that is common to the apparatus and the access node associated with the apparatus.

42. (Currently Amended) The apparatus according to claim 32, wherein the ~~apparatus~~processor is further configured to decide to change the communication connection from a current access node to a specific frequency band of a neighboring access node that is common to the apparatus and the neighboring access node to be associated with the apparatus.

43. (Previously Presented) The apparatus according to claim 32, wherein the processor is further configured to process communication information transmitted from two or more access nodes in the wireless communication network.

44. (Currently Amended) A computer program embodied on a computer readable storage medium, the program configured to controlling a processor to perform a process, the process comprising:

determining communication information and transmitting said communication information to a subscriber terminal, wherein said communication information ~~comprising~~comprises frequency band information indicating a plurality of frequency bands on which at least one access node in a wireless communication network based on an IEEE 802.11 standard is capable of communication; and

incorporating the communication information in signaling using a transmission of specific frames to said subscriber terminal, wherein

the communication information further comprises a frequency band coverage indicator related to at least one frequency band of neighboring access nodes of the apparatus in the wireless communication network.

45. (Currently Amended) A computer program embodied on a computer readable storage medium, the program configured to controlling a processor to perform a process, the process comprising:

receiving communication information transmitted from at least one access node in a wireless communication network based on an IEEE 802.11 standard, wherein said communication information ~~comprising~~comprises frequency band information indicating a plurality of frequency bands on which the at least one access node is capable of communication, wherein said communication information is received from at least one access node by signaling by transmission of specific frames;

processing the received communication information to determine in the subscriber terminal, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information and the frequency band coverage indicator; and

deciding, in the subscriber terminal, on a communication connection changeover of the subscriber terminal by using a result of the processing, wherein

the communication information further comprises a frequency band coverage indicator related to at least one frequency band of neighboring access nodes of the apparatus in the wireless communication network.

46-47. (Cancelled)

48. (Currently Amended) A method, comprising:

determining communication information from at least one access node in a wireless communication network based on an IEEE 802.22 standard, wherein said

communication information ~~comprising~~comprises frequency band information indicating a plurality of frequency bands on which said at least one access node is capable of communication; and

transmitting said communication information from said at least one access node to a subscriber terminal by signaling by transmitting specific frames, wherein

the communication information further comprises a frequency band coverage indicator related to at least one frequency band of neighboring access nodes of the apparatus in the wireless communication network.

49. (Currently Amended) A method, comprising:

receiving communication information from at least one access node in a wireless communication network based on an IEEE 802.22 standard, wherein said communication information ~~comprising~~comprises frequency band information indicating a plurality of frequency bands on which said at least one access node is configured to communicate, wherein said communication information is received by signaling by transmission of specific frames;

processing the received communication information and determining based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information and the frequency band coverage indicator; and

using a processing result for a decision on a communication connection
changeover of a subscriber terminal, wherein
the communication information further comprises a frequency band coverage
indicator related to at least one frequency band of neighboring access nodes of the
apparatus in the wireless communication network.

50-55. (Cancelled)

56. (Previously Presented) The apparatus according to claim 25, wherein the
signaling comprises a transmission of one or more specific frames.

57. (Cancelled)

58. (Previously Presented) The apparatus according to claim 28, wherein the
multiple band indicator indicates at least one frequency band.

59. (Previously Presented) The apparatus according to claim 32, wherein the
signaling comprises a transmission of one or more specific frames.

60. (Cancelled)

61. (Previously Presented) The apparatus according to claim 36, wherein the multiple band indicator indicates at least one frequency band.

62-65. (Cancelled)

66. (Previously Presented) The method according to claim 48, wherein said frequency bands comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

67. (Previously Presented) The method according to claim 48, wherein said communication information further comprises a multiple band indicator related to an access node.

68. (Previously Presented) The method according to claim 48, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of an access node.

69. (Previously Presented) The method according to claim 48, wherein said communication information further comprises a frequency channel indicator that indicates the frequency channel used by the apparatus at the respective frequency band.

70. (Previously Presented) The method according to claim 49, wherein said frequency bands comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

71. (Previously Presented) The method according to claim 49, wherein communication information is extracted from a beacon packet broadcasted from the access node.

72. (Previously Presented) The method according to claim 49, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

73. (Previously Presented) The method according to claim 49, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one transmitting access node.

74. (Previously Presented) The method according to claim 49, wherein said communication information further comprises a frequency channel indicator to indicate the frequency channel used by the access node at the respective frequency band.

75. (Previously Presented) The method according to claim 49, further comprising:

- detecting a signal strength indicator on a predetermined frequency band;
- comparing the detected signal strength indicator with a predefined threshold value,

wherein the result of the comparison indicates an estimation of the communication connection capability of an access node on another frequency band; and

- using the result of said comparison to decide on the communication connection changeover.

76. (Previously Presented) The method according to claim 49, further comprising:

- deciding to change the communication connection from the present frequency band to another frequency band that is common to the subscriber terminal and the access node associated with the subscriber terminal.

77. (Previously Presented) The method according to claim 49, further comprising:

- deciding to change the communication connection from a current access node to a specific frequency band of a neighboring access node that is common to the subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

78. (Previously Presented) The method according to claim 49, further comprising:

processing communication information transmitted from two or more access nodes in the wireless communication network.

79-84. (Cancelled)

85. (New) An apparatus, comprising:

access providing means for providing access to a wireless communication network based on an IEEE 802.11 standard;

determining means for determining and transmitting communication information to a subscriber terminal; and

incorporating means for incorporating the communication information in signaling using a transmission of specific frames to said subscriber terminal, wherein

said communication information comprises frequency band information indicating a plurality of frequency bands on which at least one access node portion of the wireless communication network is configured to communicate.

86. (New) An apparatus, comprising:

communicating means for communicating in a wireless communication network based on an IEEE 802.11 standard;

receiving means for receiving communication information transmitted from at least one access node of the wireless communication network;

processing means for processing the received communication information so as to determine, based on the communication information, a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

deciding means for deciding on a communication connection changeover for the apparatus by using a processing result, wherein

said communication information comprises frequency band information indicating a plurality of frequency bands on which the at least one access node is configured to communicate, wherein said communication information is received from said at least one access node by signaling by transmission of specific frames.